

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT
MEETING DATE: May 11, 2016

ITEM: 7

SUBJECT: **Barriers and Bridges for Direct Potable Reuse: Santa Clara Valley Water District's Pure Water Silicon Valley Program** - Information Presentation by Garth Hall, Deputy Operating Officer, Water Supply, Santa Clara Valley Water District

DISCUSSION: The Santa Clara Valley Water District has initiated the Pure Water Silicon Valley Program as a means to expand and diversify its water supply portfolio in the face of drought, the potential for further local groundwater use to cause land subsidence in Coyote Valley, and increasing uncertainty in the availability of imported water. The Program as currently envisioned includes plans to expand the District's Silicon Valley Advanced Water Purification Center, which purifies treated wastewater from the San Jose/Santa Clara wastewater treatment plant, and to purify treated wastewater from the Sunnyvale wastewater treatment plant to supply water suitable for "indirect potable reuse" (IPR) and "direct potable reuse" (DPR). Water suitable for IPR would be reinjected into local groundwater aquifers at the District's existing recharge ponds or injection wells. Once a determination has been made by the State Board that treated wastewater can be safely used for DPR, the District potentially plans to use water from the Advanced Water Purification Center for blending into its drinking water supply.

This presentation by the District's Garth Hall will cover the Program's components and current schedule, highlight the public perception and economic challenges of the Program, and describe the various regulatory hurdles the Program faces. Those hurdles include the Board's need to permit any groundwater reinjection program and any expanded treated wastewater reuse. Additionally, since the treatment of wastewater to levels suitable for IPR and DPR produces a by-product known as reverse osmosis concentrate, the Board will need to work with the District and the local wastewater agencies on how best to manage this concentrate and ensure that the wastewater agencies remain in compliance with their NPDES permits. We expect other agencies to face challenges similar to those facing the Program in implementing IPR and DPR programs in coming years.

**RECOMMEN-
DATION:**

This is an information item and no action is necessary.